**COUNTY OF SAN LUIS OBISPO**

June 2000

# 1999 Water Quality Report
# Santa Margarita

## *To our customers*

***The County of San Luis Obispo is pleased to present this annual report describing the quality of your drinking water. We sincerely hope this report gives you the information you seek and have a right to know.***

### What is the source of my drinking water?

Your water comes from two groundwater wells located in Santa Margarita. The water is cleaned through a natural filtration process as it trickles down through the ground. During this process, water may also pick up contaminants found in the soil, either natural or man-made. Groundwater is normally very clean and is simply disinfected with chlorine to help minimize viral and bacterial contamination.

Photo by Charlie Berna

Santa Margarita wells combined are capable of producing 500 gallons of water per minute. Each well is equipped with online monitoring equipment to notify operations staff if there is a problem at the well site. One of the wells has additional equipment which lowers the iron and manganese found in it to aesthetically acceptable levels.

A sanitary survey is scheduled to be completed for the Santa Margarita water system by December 2000. The survey will be available for review after completion.

### How is the water system operated?

The Santa Margarita water system is assigned one part-time water treatment operator. All operators who work for the County are certified by the California Department of Health Services (DHS). They are knowledgeable professionals dedicated to maintaining an excellent water system and providing you with the best quality water possible.

### Where is the water tested?

Water sampling and analysis are performed by the San Luis Obispo County Water Quality Laboratory. The lab is certified by the DHS as an environmental testing laboratory for bacteriological and chemical analyses. Federal and State requirements dictate that all regulatory analyses be performed by certified labs following approved procedures.

### Where can the community participate in decisions regarding water quality?

Water Works District No. 6 was recently reorganized into County Service Area (CSA) District No. 23. This reorganization will allow the District to provide extended services for water, lighting and drainage to the District's customers. The Santa Margarita CSA Board meets the first Thursday of every month at 7:00 p.m. at the Community Hall. The public is welcome to attend.

The San Luis Obispo County Board of Supervisors meets every Tuesday (except the 5th Tuesday in a month) in the board chambers located in the Government Center Annex (1050 Monterey Street, San Luis Obispo). The Board will hold budget hearings during the month of June 2000. Interested persons should check the Board's agendas for specific dates. Agendas for all Board of Supervisors meetings are posted in some County libraries, the County Government Center, and on the Board of Supervisors internet web site at http://www.slonet.org/vv/ipslocao/agendas.html.

### Is there a problem with the water quality?

As required by Federal and State lead and copper regulations, water from the consumer's tap in selected homes with lead or copper plumbing was sampled and analyzed. Although the levels of lead and copper in Santa Margarita well water are low, elevated levels of copper were found in several homes. This is most likely due to corrosion of the homeowner's plumbing or faucets. Polyphosphate treatment of Santa Margarita water was initiated in 1998 in an attempt to reduce corrosion and lower copper levels at the consumer's tap. The treatment was found to be ineffective and the County is now evaluating the use of caustic soda to limit corrosion.

### 1999 Water Statistics

- **Santa Margarita Water Production**
  - ⇒ **67.8 million gallons**
- **Average Daily Demand**
  - ⇒ **185,670 gallons**

***Este informe contiene informacíon muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.***

## *TERMS USED IN THIS REPORT:*

**Maximum Contaminant Level Goal (MCLG) and Public Health Goal (PHG) –** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the Federal Environmental Protection Agency and PHGs are set by the California Environmental Protection Agency.

**Maximum Contaminant Level (MCL) –** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**Primary Drinking Water Standards (PDWS) –** MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS) –** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

**Treatment Technique (TT) –** A required process intended to reduce the level of a contaminant in drinking water.

**Regulatory Action Level (AL) –** The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.

**NS (No Standard):** Contaminant for which there is no established MCL.
**ND (Not Detected):** Contaminant is not detectable at testing limit
**pCi/L:** picoCuries per liter (a measure of radiation)
**ppm:** parts per million, or milligrams per liter (mg/L)
**ppb:** parts per billion, or micrograms per liter (µg/L)
**NTU:** Nephelometric Turbidity Unit
**TON:** Threshold Odor Number
**LI:** Langelier Index; Noncorrosive = Any positive value, Corrosive = Any negative value

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

**Contaminants that may be present in source water include:**

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- *Radioactive contaminants* which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Health Services (Department) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water which must provide the same protection for public health.

**Tables 1,2,3,,and 4 list all of the drinking water contaminants that were detected from January 1999 through December 1999, unless otherwise noted. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk.** The Department requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, may be more than one year old.

| **Table 1 – Detection of Contaminants with a Primary Drinking Water Standard** | | | **Santa Margarita Wells** | | | |
|---|---|---|---|---|---|---|
| **Contaminant (reporting units)** | **MCL** | **PHG (MCLG)** | **Sample Date** | **Range** | **Average** | **Potential Source of Contamination** |
| Arsenic (ppb) | 50 | ----- | May 98 | ND—7.7 | 3.9 | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes |
| Barium (ppb) | 1000 | (2000) | May 98 | ND—140 | 70 | Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits |
| Fluoride (ppb) | 2000 | 1000 | May 98 | 120 —170 | 150 | Erosion of natural deposits |
| Nitrate as $NO_3$ (ppm) | 45 | 45 | May 99 | ND—4.9 | 2.5 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |

| Table 2 – Lead and Copper | | Santa Margarita Homes | | | | |
|---|---|---|---|---|---|---|
| **Contaminant (reporting units)** | **AL** | **MCLG** | **Number of Samples Collected** | **90th Percentile Level Detected** | **Number of Sites found above the AL** | **Potential Source of Contamination** |
| Lead (ppb) | 15 | 2 | 23 (1993) | 3.8 | 1 | Internal corrosion of household water plumbing systems |
| Copper (ppb) | 1300 | 170 | 23 (1993) | 1800* | 6 | Internal corrosion of household water plumbing systems |

*Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

| Table 3 – Detection of Contaminants with a Secondary Drinking Water Standard | | Santa Margarita Wells | | | |
|---|---|---|---|---|---|
| **Contaminant (reporting units)** | **MCL** | **Sample Date** | **Range** | **Average** | **Potential Source of Contamination** |
| Chloride (ppm) | 500 | | | 20 | Runoff/leaching from natural deposits; seawater influence |
| Color (CU) | 15 | | | 2 | Naturally occurring organic materials |
| Corrosivity (LI) | Noncorrosive | | -0.6—0.0 | -0.3 | Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors |
| Odor – Threshold | 3 | | 1.2—2.0 | 1.6 | Naturally occurring organic materials |
| Manganese (ppb) | 50 | 1998, 1999 | ND—46 | 2.2 | Leaching from natural deposits; treatment by-product |
| Specific Conductance (micromhos) | 1600 | | 611—652 | 632 | Runoff/leaching from natural deposits; seawater influence |
| Sulfate (ppm) | 500 | | 13—78 | 46 | Runoff/leaching from natural deposits; industrial wastes |
| Turbidity (NTU) | 5 | | | 0.13 | Soil Runoff |
| Total Dissolved Solids (ppm) | 1000 | | 410—520 | 460 | Runoff/leaching from natural deposits |

| Table 4 – Detection of Contaminants | Santa Margarita Wells | | |
|---|---|---|---|
| **Contaminant (reporting units)** | **Range** | **Average** | **Potential Source of Contamination** |
| Alkalinity as $CaCO_3$ (ppm) | 240—300 | 270 | Runoff/leaching from natural deposits; seawater influence |
| Calcium (ppm) | 30—54 | 42 | Runoff/leaching from natural deposits; seawater influence |
| Hardness (ppm) | 140—290 | 220 | Generally found in ground and surface water |
| Magnesium (ppm) | 16—38 | 27 | Runoff/leaching from natural deposits; seawater influence |
| pH | 6.92—7.5 | 7.2 | Runoff/leaching from natural deposits; seawater influence |
| Sodium (ppm) | 26—90 | 58 | Runoff/leaching from natural deposits; seawater influence |

## Additional General Information on Drinking Water

**All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.** More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDs or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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## Additional General Information on Drinking Water (Continued)

Additionally, the Office of Ground Water and Drinking Water at EPA maintains a website with useful information on drinking water. The address is http://www.epa.gov/OGWDW/. Additional information can be obtained by accessing the American Water Works Association's website at http://www.awwa.org or by calling Percy Garcia , Water Quality Manager at 781-5111, John Beaton, Senior Water Systems Chemist at 781-5109, or Faith Zenker, Water Systems Chemist at 781-1576 at the County Water Quality Laboratory.

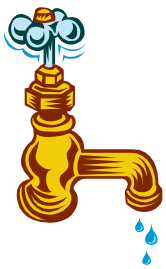
Picture of a wharf head

### Anticipated Projects for 2000 through 2001

- ✔ Storage Tank Restoration
- ✔ Replacement of 2" line on G Street
- ✔ Replacement of wharf head with standard fire hydrant
- ✔ Installation of new main line valves
- ✔ Groundwater and new source study
- ✔ Sanitary Survey

Fire hydrants will eventually replace all wharf heads in Santa Margarita.

## Water Conservation



The County of San Luis Obispo would like to remind all water users of the importance of water conservation. It is important that this issue is addressed at all levels including both the county and the individual community members. There are many ways to conserve water and a few examples are:

- Grow plants that do not need a lot of water, such as native plants
- Fix leaky pipes, interior faucets or hose bibs
- Install low-flow toilets & shower heads
- Water gardens and wash cars in the evening, rather than during the day when water will evaporate
- Sweep your pavement rather than hose it down
- Use hose with shutoff nozzle for washing cars